

REMARKS

Claims 12-25 and 51-61 are pending in the Application.

Claims 12-25 and 51-61 stand rejected.

Claims 12, 23, 51, and 55 are amended herein.

Claims 16, 20, and 58 are cancelled herein without prejudice.

No new matter has been added to the Application.

I. CLAIM AMENDMENT

Claim 55 is amended herein to correct a typographical error. Applicant respectfully asserts that the amendment to Claim 55 is not a narrowing amendment made for a reason related to the statutory requirements for a patent that will give rise to prosecution history estoppel. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 736-37, 122 S. Ct. 1831, 1840, 62 U.S.P.Q.2d 1705 (2002).

II. CLAIM OBJECTIONS

Examiner objected to Claim 61 under 37 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of the previous claim. Office Action, at 2-3. Claim 61 has been rewritten in independent form as suggested by the Examiner. Amended Claim 61, which includes features of Claims 51 and 58, recites:

61. A liquid marker compound comprising:
- a first marker having a molar absorptivity of approximately 5×10^4 L mole⁻¹ cm⁻¹ or greater in the wavelength range of about 600 to 1000 nm, wherein the presence of the first molecular marker can be determined by a handheld IR spectrometer; and
 - a second marker wherein the second marker is a molecular marker, wherein a molecular weight of the second marker is artificially enhanced with a non-radioactive isotope.

Applicant respectfully requests removal of the objection to Claim 61.

III. REJECTION UNDER 35 U.S.C. § 112, ¶ 1

The Examiner rejected Claims 12, 14-23, and 25 under 35 U.S.C. § 112, ¶ 1. Office Action, at 3-4. Claims 12 and 23 are amended herein as suggested by the Examiner. Accordingly, Applicant respectfully requests the Examiner withdraw the rejections of Claims 12, 14-23, and 25 under § 112, ¶ 1.

IV. REJECTION UNDER 35 U.S.C. § 112, ¶ 2

The Examiner rejected Claims 12-25 and 51-61 under 35 U.S.C. § 112, ¶ 2. Office Action, at 4. The paragraph beginning on page 11, line 14 of the Application is amended herein to clarify the meaning of "molecular marker." Portions of this paragraph have been deleted. For clarification, other paragraphs in the Application as originally filed (paragraphs beginning on page 13, line 16; page 13, line 22, and page 14, line 5) have been deleted from their original location and inserted following the paragraph beginning on page 11, line 14.

The paragraph beginning on page 11, line 14 is amended herein to recite:

Molecular markers include molecules in which the molecular weight of the molecule is artificially enhanced. For example, any element or compound which can be produced with stable isotopes not generally found in nature is suitable for the molecular marker. The molecular marker is labeled with a non-radioactive atom in at least one specific site in the molecule. Possibly used are those compounds deuterated or rendered isotopic by carbon-13 or fluorine-19. Also used are nitrogen-15, oxygen-17 and oxygen-18 isotopic materials. Thus, molecular markers may be referred to as molecular mass-differentiated markers. The molecular marker should have good thermal stability.

This amendment, which adds no new matter, provides a clear definition of "molecular marker" as used in the claims. Applicant respectfully requests removal of the 35 U.S.C. § 112, ¶ 2 rejection of Claims 12-25 and 51-61.

V. REJECTIONS UNDER 35 U.S.C. § 102(b)

The Examiner rejected Claims 12-15, 17-18, and 51-56 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,525,516 to Krutak ("*Krutak*").

The Examiner rejected Claims 12-15, 17-18, and 51-56 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,312,958 to Meyer ("*Meyer*").

Applicant traverses these rejections.

Claims 12 and 51 are amended herein to include features of Claims 16, 20, and 58. Amended Claims 12 and 51 recite in part: "wherein a molecular weight of the second marker is artificially enhanced with a non-radioactive isotope."

Applicant respectfully requests removal of the 35 U.S.C. § 102(b) rejections of Claims 12-15, 17-18, and 51-56.

VI. REJECTION UNDER 35 U.S.C. § 103(a)

1. Claims 16, 20-22, and 57-60

The Examiner rejected Claims 16, 20-22, and 57-60 under 35 U.S.C. § 103(a) as being unpatentable over *Meyer* or *Krutak* in view of U.S. Patent No. 5,474,937 to Anderson II et al. ("*Anderson '937*"). Office Action, at 7-8.

Applicant traverses this rejection.

Meyer teaches a method of marking liquids using at least two markers that absorb in the 600-1200 nm region of the spectrum and reemit fluorescent light, and a method for detecting markers in liquids by detecting fluorescent light reemitted by the markers. *Meyer*, Abstract.

Krutak teaches a method for imparting invisible markings for identification purposes to petroleum hydrocarbons by incorporating one or more infrared fluorescing compounds, and exposing the marked hydrocarbon composition to near infrared radiation and then detecting the emitted fluorescent light via near infrared light detection means. *Krutak*, Abstract.

Anderson '937 teaches a method that employs a non-radioactive isotope of either a chemical element or an organic compound. *Anderson '937*, col. 2, ll. 23-25. *Anderson '937* states: "Isotopic identification may readily be achieved by mass spectroscopy, nuclear magnetic resonance spectroscopy or gas chromatography analysis. *Id.*, col. 5, ll. 17-19. *Anderson '937* further states: "The presently preferred analysis technique for the detection of tagging agents

utilizes a gas chromatograph coupled with a mass spectrometer although other chromatographic techniques can be used as well." *Id.*, col. 6, ll. 35-38.

Meyer and *Krutak* teach fluorescence detection. *Anderson '937* teaches mass detection. There is no indication that the non-radioactive isotope of *Anderson '937* would be detectable by the method of *Meyer* or *Krutak*. As such, there is no motivation to combine the cited art, and no reasonable expectation of success. Furthermore, the proposed modification of *Meyer* or *Krutak* with *Anderson '937* would render *Meyer* and *Krutak* unsatisfactory for its intended purpose.

Thus, a *prima facie* case of obviousness has not been established. Accordingly, Applicants respectfully requests that the Examiner withdraw the § 103(a) rejection of Claims 16, 20-22, and 57-60 as being unpatentable over *Meyer* or *Krutak* in view of *Anderson '937*.

2. Claims 19 and 57

The Examiner rejected Claims 19 and 57 under 35 U.S.C. § 103(a) as being unpatentable over *Meyer* or *Krutak* in view of U.S. Patent No. 5981,283 to Anderson II et al. ("*Anderson '283*"). Office Action, at 8.

Applicant traverses this rejection.

For at least the reasons discussed in Section V above, Claims 19 and 57 are patentable over *Meyer* or *Krutak* in view of *Anderson '283*. Accordingly, Applicants respectfully requests that the Examiner withdraw the § 103(a) rejection of Claims 19 and 57 as being unpatentable over *Meyer* or *Krutak* in view of *Anderson '283*.

3. Claims 23-25

The Examiner rejected Claims 23-25 under 35 U.S.C. § 103(a) as being unpatentable over *Meyer* in view of *Anderson '283*". Office Action, at 9.

The Examiner rejected Claims 23-25 under 35 U.S.C. § 103(a) as being unpatentable over *Krutak* in view of *Anderson '283*". Office Action, at 10.

Applicant traverses these rejections.

Meyer and *Krutak* teach fluorescence detection. *Anderson '283* teaches mass detection. There is no indication that the tagging agents of *Anderson '283* would be detectable by the method of *Meyer* or *Krutak*. As such, there is no motivation to combine the cited art, and no

reasonable expectation of success. Furthermore, the proposed modification of *Meyer* or *Krutak* with *Anderson* '283 would render *Meyer* and *Krutak* unsatisfactory for its intended purpose.

Thus, a *prima facie* case of obviousness has not been established. Accordingly, Applicants respectfully requests that the Examiner withdraw the rejections of Claims 23-25 as being obvious under § 103(a) over *Meyer* in view of *Anderson* '283 and *Krutak* in view of *Anderson* '283.


VII. CONCLUSION

As a result of the foregoing, it is asserted by Applicant that the Claims in the Application are now in condition for allowance, and respectfully requests allowance of such Claims.

Please apply \$120 for the required fee for the Petition for One Month Extension and any other necessary charges or credits to Deposit Account No. 06-1050. Please reference Attorney Docket No. 21546-022001.

Respectfully submitted,

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Kelly K. Kordzik
Reg. No. 36,571

Fish & Richardson P.C.
One Congress Plaza, Suite 810
111 Congress Avenue
Austin, TX 78701
Telephone: (512) 226-8148
Facsimile: (512) 320-8935